

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
14 April 2005 (14.04.2005)

PCT

(10) International Publication Number
WO 2005/032414 A3

- (51) International Patent Classification⁷: **A61F 2/06**
- (21) International Application Number:
PCT/US2004/031899
- (22) International Filing Date:
29 September 2004 (29.09.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/507,259 30 September 2003 (30.09.2003) US
- (71) Applicant (for all designated States except US): **ALVE-OLUS INC.** [—/US]; 401 North Tryon Street, 10th Floor, Charlotte, NC 28202 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **NISSL, Thomas** [DE/DE]; Gillmoor 15, 21441 Garstedt (DE). **MAN-GIARDI, Eric** [US/US]; 701 Queen Charlotte Court, Charlotte, NC 28211 (US).
- (74) Agent: **ALEXANDER, Tony**; c/o PortfolioIP, P.O. Box 52050, Minneapolis, MN 55402 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- (88) Date of publication of the international search report:
2 June 2005
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MODULAR STENT

(57) Abstract: The invention is relative to a stent 1 with a tubular support frame 2 consisting of axially successively following, interconnected annular segments 3, 4, 5, which support frame 2 is surrounded on its outside by a thread 11. The thread ends 12, 13 are guided via a deflection 14 from the outside into support frame 2, where they are coupled by a connector consisting of a material visible in x-rays. Deflection 14 is realized by two deflection elements 15, 16 in the form of eyelets provided on annular segment 3. Deflection elements 15, 16 are arranged on the circumference of support frame 2 at an interval from one another and are provided on end-side annular segment 3, viewed in longitudinal direction L of the stent.



WO 2005/032414 A3